The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original): An ionic liquid of the formula

$$K^+A^-$$
 (I)

wherein:

K⁺ is a cation selected from

where

 R^1 to R^6 are identical or different and are each individually - H,

- halogen,
- an alkyl radical (C₁ to C₈), which is unsubstituted or partially or fully substituted by F, Cl, $N(C_nF_{(2n+1-x)},H_x)_2$, $O(C_nF_{(2n+1-x)}H_x)$, or $(C_nF_{(2n+1-x)},H_x)$, where 1 < n < 6 and $0 < x \le 13$,
- a phenyl radical which is unsubstituted or partially or fully substituted by F, Cl, $N(C_nF_{(2n+1+x)}H_x)_2$, $O(C_nF_{(2n+1-1)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$ or $C_nF_{(2n+1-x)}H_x$ where 1 < n < 6 and $0 < x \le 13$, or
- one or more pairs of adjacent R^1 to R^6 can also be an alkylene or alkenylene radical having up to 8 C atoms and which is unsubstituted or partially or fully unsubstituted by halogen, $N(C_nF_{(2n+1x)}H_x)_2$, $O(C_nF_{(2n+1-x)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$ or $C_nF_{(2n+1-x)}H_x$ where 1 < n < 6 and $0 \le x \le 13$; and
 - A is an anion of the following formula

$$[PF_x(C_yF_{2y+1-z}H_z)_{6-x}]^{-1}$$

where $1 \le x < 6$

 $1 \le y \le 8$ and

 $0 \le z \le 2v+1.$

- 2. (Original): A compound according to claim 1, wherein at least one R¹ to R⁶ group is a halogen.
- 3. (Original): A compound according to claim 1, wherein at least one R^1 to R^6 group is an alkyl radical (C_1 to C_8), which is unsubstituted or partially or fully substituted by F, Cl, N($C_nF_{(2n+1-x)},H_x$)₂, O($C_nF_{(2n+1-x)}H_x$), or ($C_nF_{(2n+1-x)},H_x$), where 1 < n < 6 and $0 < x \le 13$.
- 4. (Original): A compound according to claim 1, wherein at least one R^1 to R^6 group is a phenyl radical which is unsubstituted or partially or fully substituted by F, Cl, $N(C_nF_{(2n+1+x)}H_x)_2$, $O(C_nF_{(2n+1-1)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$ or $C_nF_{(2n+1-x)}H_x$ where 1 < n < 6 and

- 5. (Original): A compound according to claim 1, wherein at least one adjacent pair of R^1 to R^6 is an alkylene or alkenylene radical having up to 8 C atoms and which is unsubstituted or partially or fully unsubstituted by halogen, $N(C_nF_{(2n+1x)}H_x)_2$, $O(C_nF_{(2n+1-x)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$ or $C_nF_{(2n+1-x)}H_x$ where 1 < n < 6 and $0 \le x \le 13$.
- 6. (Original): A compound according to claim 1, wherein said compound has at least one perfluorinated alkyl group.
- 7. (Original): A compound according to claim 1, wherein said compound contains at least one C_yF_{2y+1-z}H_z group selected from C₂F₅ and C₄F₉.
- 8. (Original): An electrochemical cell comprising a cathode, an anode, a separator, and an ionic liquid of claim 1.
- 9. (Original): A capacitor comprising of at least a pair of electrodes, a separator, and an ionic liquid of claim 1.
- 10. (Original): An electrolyte composition comprising an ionic liquid of claim 1 and an aprotic solvent.
- 11. (Original): An electrolyte composition comprising an ionic liquid of claim 1 and a conductive salt.
- 12. (Previously Presented): A compound according to claim 1, wherein said compound is:
- 1-ethyl-3-methylimidazolium tris(pentafluoroethyl)trifluorophosphate;
- 1,2-dimethyl-3-propylimidazolium tris(pentafluoroethyl)trifluorophosphate; or 1-ethyl-3-methylimidazolium tris(nonafluorobutyl)trifluorophosphate.

- 13. (Previously Presented): A compound according to claim 12, wherein said compound is 1-ethyl-3-methylimidazolium tris(pentafluoroethyl)trifluorophosphate.
- 14. (Previously Presented): A compound according to claim 1, wherein R^1 to R^6 are each H or a C_1 to C_8 alkyl, which is unsubstituted or partially or fully substituted by F, C_1 , $N(C_nF_{(2n+1-x)},H_x)_2$, $O(C_nF_{(2n+1-x)},H_x)_1$, or $(C_nF_{(2n+1-x)},H_x)_2$, where 1 < n < 6 and $0 < x \le 13$.
- 15. (Previously Presented): A compound according to claim 1, wherein R^1 to R^6 are each H or a C_1 to C_8 alkyl.
- 16. (Previously Presented): An electrolyte composition according to claim 11, wherein said conductive salt is LiPF₆, LiBF₄, LiClO₄, LiAsF₆, LiCF₃SO₃, LiN(CF₃SO₂)₂, LiC(CF₃SO₂)₃ or a mixture thereof.
- 17. (Previously Presented): An electrolyte composition according to claim 11, wherein said composition contains 1-99 wt% of said ionic liquid.
- 18. (Previously Presented): An electrolyte composition according to claim 11, wherein said composition further contains an organic isocyanate.
 - 19. (Previously Presented): A compound according to claim 1, wherein $2 \le y \le 8$.
- 20. (Previously Presented): A compound according to claim 1, wherein $1 \le z \le 2y+1$.
 - 21. (New): A compound according to claim 1, wherein K⁺ is

22. (New): A compound according to claim 1, wherein K⁺ is

23. (New): A compound according to claim 1, wherein K⁺ is

24. (New): A compound according to claim 1, wherein K^+ is

25. (New): A compound according to claim 1, wherein $K^{\scriptscriptstyle +}$ is

26. (New): A compound according to claim 1, wherein K^+ is

27. (New): A compound according to claim 1, wherein K^+ is

28. (New): A compound according to claim 1, wherein K⁺ is